CONTENTS OF VOLUME 385

April 1987

HATHORN M.K.S. Respiratory sinus arrhythmia in new-born infants. 1

GARDINER Philip F. & OHLA Allan E. Contractile and electromyographic characteristics of rat plantaris motor unit types during fatigue *in situ*. 13

BENNETT Terence & GARDINER Sheila M. Water deprivation: effects on fluid and electrolyte handling and plasma biochemistry in Long–Evans and Brattleboro rats. 35

SKYDSGAARD Jørgen M. Influence of chloride concentration and pH on the ^{36}Cl efflux from depolarized skeletal muscle of *Rana temporaria*. 49

ILES J.F. & ROBERTS R.C. Inhibition of monosynaptic reflexes in the human lower limb. 69

HODSON S.A. & WIGHAM C.G. Paracellular ionic and transcellular water diffusions across rabbit corneal endothelium. 89

HODSON S.A. & LAWTON D.M. The apparent reflexion coefficient of the leaky corneal endothelium to sodium chloride is about one in the rabbit. 97

ANDERSSON G. & ARMSTRONG D.M. Complex spikes in Purkinje cells in the lateral vermis (b zone) of the cat cerebellum during locomotion. 107

LAITINEN L.A., LAITINEN M.V. Annika & WIDDICOMBE J.G. Parasympathetic nervous control of tracheal vascular resistance in the dog. 135

MOLENAAR P.C., OEN B.S., POLAK R.L. & VAN DER LAAKEN A.L. Surplus acetyl choline and acetylcholine release in the rat diaphragm. 147

HEADLEY P. Max, PARSONS Chris G. & WEST David C. The role of *N*-methyl-aspartate receptors in mediating responses of rat and cat spinal neurones to defined sensory stimuli. 169

KAWA Kazuyoshi Transient outward currents and changes of their gating properties after cell activation in thrombocytes of the newt. 189

ART J.J. & FETTIPLACE R. Variation of membrane properties in hair cells isolated from the turtle cochlea. 207

BORMANN J., HAMILL O.P. & SAKMANN B. Mechanism of anion permeation through channels gated by glycine and γ-aminobutyric acid in mouse cultured spinal neurones. 243

CONNORS Barry W. & RANSOM Bruce R. Electrophysiological properties of ependymal cells (radial glia) in dorsal cortex of the turtle, *Pseudemys scripta*. 287

KLÉBER A.G. & RIEGGER C.B. Electrical constants of arterially perfused rabbit papillary muscle. 307

SINE Steven M. & STEINBACH Joe Henry Activation of acetylcholine receptors on clonal mammalian BC3H-1 cells by high concentrations of agonist. 325

LIPTON Stuart A. & TAUCK David L. Voltage-dependent conductances of solitary ganglion cells dissociated from the rat retina. 361

EDGLEY S.A. & JANKOWSKA E. Field potentials generated by group II muscle afferents in the middle lumbar segments of the cat spinal cord. 393

REES H. & ROBERTS M.H.T. Anterior pretectal stimulation alters the responses of spinal dorsal horn neurones to cutaneous stimulation in the rat. 415

BRADLEY Arlene B. & MORGAN Kathleen G. Alterations in cytoplasmic calcium sensitivity during porcine coronary artery contractions as detected by aequorin. 437

FORD Lincoln E. & GILBERT Susan H. The kinetics of heat production in response to active shortening in frog skeletal muscle. 449

GREGORY P.C. & RAYNER D.V. The influence of gastrointestinal infusion of fats on regulation of food intake in pigs. 471

AICKIN C. Claire Investigation of factors affecting the intracellular sodium activity in the smooth muscle of guinea-pig ureter. 483

KELLY S.S. & ROBBINS N. Statistics of neuromuscular transmitter release in young and old mouse muscle. 507

ASHCROFT Francis M., ASHCROFT Stephen J.H. & HARRISON Donna E. Effects of 2-ketoisocaproate on insulin release and single potassium channel activity in dispersed rat pancreatic β-cells. 517

DICKSON K.A. & HARDING R. Restoration of lung liquid volume following its acute alteration in fetal sheep. 531

BACHOO Manjit & POLOSA Canio Properties of the inspiration-related activity of sympathetic preganglionic neurones of the cervical trunk in the cat. 545

FEDIDA D., NOBLE D., SHIMONI Y. & SPINDLER A.J. Inward current related to contraction in guinea-pig ventricular myocytes. 565

RITCHIE Aileen K. Two distinct calcium-activated potassium currents in a rat anterior pituitary cell line. 591

RITCHIE Aileen K. Thyrotropin-releasing hormone stimulates a calcium-activated potassium current in a rat anterior pituitary cell line. 611

ELDRIDGE Frederic L., KILEY James P. & PAYDARFAR David Dynamics of medullary hydrogen ion and respiratory responses to square-wave changes of arterial carbon dioxide in cats. 627

EISNER D.A., VALDEOLMILLOS M. & WRAY Susan The effects of membrane potential on active and passive sodium transport in *Xenopus* oocytes. 643

HOPPELER Hans, HUDLICKA Olga & UHLMANN Esther Relationship between mitochondria and oxygen consumption in isolated cat muscles. 661

DUNANT Y., ESQUERDA J.E., LOCTIN Françoise, MARSAL J. & MULLER D. Botulinum toxin inhibits quantal acetylcholine release and energy metabolism in the *Torpedo* electric organ. 677

BERWE Dorothea, GOTTSCHALK G. & LÜTTGAU H.Ch. Effects of the calcium antagonist gallopamil (D600) upon excitation–contraction coupling in toe muscle fibres of the frog. 693

EDMAN K.A.P. & REGGIANI C. The sarcomere length–tension relation determined in short segments of intact muscle fibres of the frog. 709

STORM Johan F. Action potential repolarization and a fast after-hyperpolarization in rat hippocampal pyramidal cells. 733